

## **Amendments to the Claims**

This listing of claims replaces all prior versions, and listings, of claims in the application:

### **Listing of claims**

1. (Currently amended) A method for managing the individual feeding of cattle, the method comprising the step of:
  - (a) predicting a daily feed requirement for an individual animal, from characteristics for the individual animal, taking into account genotype, diet, and environmental differences; and,
  - (b) predicting a daily weight gain of the individual animal from said daily feed requirement;

wherein said daily feed requirement for the individual animal is provided in order to allocate feed fed to the individual animal in a pen of animals;

wherein said characteristics comprise: initial body weight, final body weight, fat characteristics, muscle characteristics, body characteristics.
2. (Original) The method of claim 1 further comprising the step of:

repeating steps (a) and (b) until a target finished body weight is substantially reached.
3. (Original) The method of claim 2 further comprising the step of:

predicting number of days to achieve a target finished body weight for the individual animal taking into account genotype and environmental differences.

4. (Original) The method of claim 3 further comprising the step of:

predicting performance information for the individual animal taking into account genotype and environmental differences;

wherein the performance information comprises feed intake, and feed efficiency.

5. (Original) The method of claim 1 further comprising the step of:

predicting carcass weight from the finished weight.

6. (Original) The method of claim 1 further comprising the step of:

predicting daily and accumulated feed cost.

7. (Original) The method of claim 1 further comprising the step of:

adjusting the predicted daily feed requirement until predicted daily gain substantially equals actual daily gain.

8. (Original) The method of claim 1 wherein the step of predicting the daily feed requirement for the individual animal further comprises the steps of:

calculating an empty body fat percentage for the individual animal taking into account individual animal characteristics; and

calculating an adjusted shrunk body weight of the individual animal.

9. (Currently amended) A system for managing the individual feeding of cattle, the system comprising:

at least one processor; and,

at least one computer readable memory having computer readable code embodied therein,  
the computer readable code capable of causing the at least one processor to:

obtain the daily feed requirement for an individual animal, from characteristics for the individual animal, taking into account genotype and environmental differences, and

obtain a daily weight gain of the individual animal from said daily feed requirement;

input means for providing input data to the at least one processor;

output means for obtaining output data from the at least one processor

wherein said daily feed requirement and said daily weight gain for the individual animal are provided using said output means in order to allocate feed fed to the individual animal in a pen of animals; and

wherein said characteristics comprise: initial body weight, final body weight, fat characteristics, muscle characteristics, body characteristics.

10. (Original) The system of claim 9 wherein the computer readable code is further capable of causing the at least one processor to:

repeatedly obtain the daily feed requirement for an individual animal, taking into account genotype, diet, and environmental differences, and the daily weight gain until a finished weight is reached.

11. (Original) The system of claim 10 wherein the computer readable code is further capable of causing the at least one processor to:

predict number of days to achieve a target finished body weight for the individual animal taking into account genotype and environmental differences.

12. (Original) The system of claim 11 wherein the computer readable code is further capable of causing the at least one processor to:

predict performance information for the individual animal taking into account genotype and environmental differences;

wherein the performance information comprises feed intake, and feed efficiency.

13. (Original) The system of claim 9 wherein the computer readable code is further capable of causing the at least one processor to:

predict carcass weight from the finished weight.

14. (Original) The system of claim 8 wherein the computer readable code is further capable of causing the at least one processor to:

predict saving in feed cost.

15. (Original) The system of claim 8 further comprising:

means for remote access and distributed processing.

16. (Currently amended) A computer program product comprising:

a computer usable medium having computer readable code embodied therein, the computer readable code capable of causing a computer system to:

obtain a daily feed requirement for an individual animal, from characteristics for the individual animal, taking into account genotype and environmental differences; and,

obtain a daily weight gain of the individual animal from said daily feed requirement;

whereby said daily feed requirement for the individual animal can be provided in order to allocate feed fed to the individual animal in a pen of animals; and

wherein said characteristics comprise: initial body weight, final body weight, fat characteristics, muscle characteristics, body characteristics.

17. (Original) The computer program product of claim 16 wherein the computer readable code is further capable of causing the computer system to:

repeatedly obtain the daily feed requirement for an individual animal taking into account genotype, diet, and environmental differences, and predicting a daily weight gain until a finished weight is reached.

18. (Original) The computer program product of claim 17 wherein the computer readable code is further capable of causing the computer system to:

predict number of days to achieve a target finished body weight for the individual animal taking into account genotype and environmental differences.

19. (Original) The computer program product of claim 18 wherein the computer readable code is further capable of causing the computer system to:

predict performance information for the individual animal taking into account genotype and environmental differences;

wherein the performance information comprises feed intake, and feed efficiency.

20. (Original) The computer program product of claim 18 wherein the computer readable code is further capable of causing the computer system to:

predict carcass weight from the finished body weight.

21. (Original) The computer program product of claim 16 wherein the computer readable code is further capable of causing the computer system to:

predict saving in feed amount and cost.

22. (Currently amended) A system for managing the individual feeding of cattle comprising:

means for predicting a daily feed requirement for an individual animal, from characteristics for the individual animal, taking into account genotype, diet, and environmental differences; and,

means for predicting a daily weight gain for the individual animal from said daily feed requirement;

wherein means implemented in software are implemented in a computer program product comprising a computer usable medium having computer readable code embodied therein;

wherein said characteristics comprise: initial body weight, final body weight, fat characteristics, muscle characteristics, body characteristics; and

whereby said daily feed requirement for the individual animal is provided in order to allocate feed fed to the individual animal in a pen of animals.

23. (Original) The system of claim 22 further comprising:

means for repeatedly predicting the daily feed requirement for an individual animal taking into account genotype, diet, and environmental differences, and the daily weight gain until a finished body weight is reached.

24. (Original) The system of claim 23 further comprising:

means for predicting number of days to achieve a target finished body weight for the individual animal taking into account genotype and environmental differences;

25. (Original) The system of claim 24 further comprising:

means for predicting performance information for the individual animal taking into account genotype and environmental differences;

wherein the performance information comprises feed intake, and feed efficiency.

26. (Original) The system of claim 22 further comprising:

means for adjusting the predicted daily feed requirement until predicted daily gain substantially equals actual daily gain.

27. (Original) The system of claim 22 further comprising:

means for predicting daily and accumulated feed cost.